As Prepared for Delivery

Protecting Our Future: U.S. Environmental Policies

Tahra Vose
Second Secretary for Economic Affairs
United States Embassy

June 2, 2005
Sejong University

Thank you, Professor Jeon. I'm grateful to you and to Sejong University for providing this opportunity for me to share some thoughts about the efforts of the United States Government to preserve the national and global environment for future generations.

World Environment Day 2005

What brings us together at this particular time is, of course, World Environment Day, coming up on June 5. World Environment Day is observed in more than 100 countries. Many of you may recall that Seoul was the host of World Environment Day observances in 1997.

This year, for the first time since World Environment Day was first celebrated in 1972, the international observance of the day is being held in a U.S. city, San Francisco -- the birthplace of the United Nations. Events began on June 1 and will continue over five days, focused on the theme of "Green Cities" and urban environmental issues.

With just over half of the world's people now living in cities, urban populations consume 75 percent of the world's natural resources and produce 75 percent of its waste, so designing more sustainable approaches to urban living is key to preserving our natural heritage.

More than 70 mayors from around the world are expected to participate. The urban leaders plan to exchange ideas and sign a series of accords covering seven areas key to sustainable urban living: energy, waste reduction, urban design, urban nature, transportation, environmental health and water. We have copies in your packet of the draft "Urban Environmental Accords" expected to be agreed by the mayors.

U.S. Role in Launching the Environmental Movement

San Francisco's role as host of the World Environment Day 2005 observances makes this an opportune moment to recall the role of the United States in helping to launch the global environmental movement.

Industrial development in the United States from the late 19th Century to the mid 20th Century led to skies blackened from smokestack emission and rivers fouled with industrial wastes. In one incident in the 1950's, the Cuyahoga River, running through Cleveland, Ohio, and polluted by chemical factory wastes, caught fire. Accustomed to such degradation over many years, the public raised no outcry.

By the 1960's, public attitudes began to change. Rachel Carson's book, "Silent Spring," describing a future without birds due to the devastating long-term effects of the highly toxic pesticides and other chemical agents then commonly used in American agriculture and industry, was a surprise best seller. By 1969, when the Cuyahoga River again caught fire, the reaction was immediate and intense.

Two years before the UN first declared World Environment Day, on April 22, 1970, 20 million Americans gathered all over the country to demand that society pay more attention to cleaning up the nation's air and water and to protecting the environment from future harm. That first "Earth Day" gathering was a seminal event that helped move environmentalism from the intellectual fringe to the mainstream of American politics.

Groundbreaking federal legislation followed the success of the first Earth Day. The U.S. Environmental Protection Agency was established that same year, and the Clean Air Act and the Clean Water Act soon followed. Not many years later came the Endangered Species Act.

Among the many far-reaching provisions of these bills was the requirement that automobiles use unleaded gasoline, achieve a minimum number of miles per gallon, and be equipped with catalytic converters to reduce the amount of toxic fumes released by automobile exhaust. Americans also turned to grass-roots strategies such as recycling.

Protecting the environment is now ingrained in the American psyche. In polls, more than 60 percent of Americans describe themselves as active environmentalists or sympathetic to the environment; 70 percent purchase what they describe as "environmentally friendly" products; 80 percent say they have reduced household energy use; and 90 percent recycle on a routine basis. Another survey, from April 2000, showed that Americans overwhelmingly support our major environmental laws, and more than 80 percent favor strengthening environmental standards even further.

Progress in Cleaning Up the Nation's Air, Water and Toxic Waste

Since the passage of the seminal legislation in the early 1970's, the U.S. has made enormous progress, under both Republic and Democratic administrations, in cleaning up the damage from a century of environmental neglect.

Take air pollution as an example: between 1970 and 2002, our economy grew 164 percent, our population increased by 39 percent, and our energy consumption increased by 42 percent. Despite all this growth, aggregate emissions of the six major air pollutants declined by 48 percent.

Let me repeat that: despite having an economy that is more than two-and-a-half times as big, our total annual emissions of the six major air pollutants have fallen by almost half. That is truly significant progress, and the result is lower concentrations of these pollutants in the air Americans breathe.

In the area of water pollution, the U.S. has also made huge progress. In 1972, only 36 percent of the nation's stream miles were assessed as safe for fishing and swimming. Today about 60 percent are safe for such uses. A good example is the Potomac River, flowing through our nation's capital. In the 1970's significant stretches of it were dead. Now it again has fish and watersports, and occasionally there are even beavers chewing on the famed cherry trees near the Jefferson Memorial.

In 1993, only 79 percent of Americans were served by community water systems that met all health standards. By 2002 that figure rose to 94 percent.

Emissions of sulfur dioxide from power plants, the main component in the acid rain that killed lakes and forests in the Northeast United States, have been cut by 41 percent since 1980. This was accomplished using a market-based "cap and trade" system.

There are other significant measures of progress. In the 1970's, nearly 90 percent of children in the United States had blood lead levels above 10 micrograms per deciliter, compared to just 2.2 percent today. And even as our economy has continued to grow, industrial releases of 332 toxic chemicals are down nearly 50 percent since 1988 and continue to decline. Meanwhile, implementing the 1996 Food Quality Protection Act, the Environmental Protection Agency has reassessed nearly 70 percent of existing pesticides to make sure they meet today's standards of food safety. As a result, many pesticides uses have been taken off the market, and others face stricter regulation.

The dramatic decline in the nation's wetlands -- which were disappearing at the rate of some 500,000 acres per year in 1970 -- has been halted. Wetlands provide crucial habitat for birds and other creatures and are key to healthy ecosystems.

Recycling and composting of municipal waste has grown dramatically, up by 10 times over the last decade

Progress Continues

These positive trends have continued since 2001 under the Bush Administration.

Air pollution has been cut by 10 percent over the last four years, and new rules promise further advances.

A new rule on heavy equipment using diesel fuel will cut emissions from that source by 90 percent over the next 10 years. Another will force utilities to cut mercury emissions by 70 percent over 15 years -- the first time that mercury emissions from power plants

have been regulated, even though coal-fired plants account are the largest source of the mercury pollution in the U.S. A third, the Clean Air Interstate Rule, will force up to a 70 percent reduction in emissions of sulfur dioxide (SO2) and of nitrogen oxide (NO2) by coal-fired power plants. And for the first time in a decade, the Bush Administration raised the Corporate Average Fuel Economy standards for pickup trucks and sport utility vehicles (SUVs), which will lead to further cuts in emissions.

The Bush Administration has also addressed toxic waste. Since 2001, nearly 1200 contaminated and abandoned industrial sites have been cleaned up and made available for productive use.

In April, 2004, President Bush announced a major new initiative to go beyond America's success in halting the destruction of wetlands. He laid out a vision of reversing the decline and of restoring or creating 3 million acres of wetlands over five years. Already more than 800,000 acres have been restored or enhanced under his policy.

Technology is Key to Future Progress

Despite all these achievements, there is much still to do. New information about the damage done by pollution continually sets the bar higher. When he announced the Administration's 2004 Clean Air Strategy, including the mercury, power-plant emissions and diesel equipment rules mentioned above, former EPA Administrator Michael Leavitt said "Clean air is a national success story….This isn't about the air getting dirtier. The air is getting cleaner. These new rules are about our new understanding of health threats; about our standards getting tougher and our national resolve to meet them." If fully supported by Congress, the Administration's Clear Skies legislation promises to prevent up to 14,000 premature deaths every year by 2020, saving tens of billions of dollars in health care costs annually.

Reaching higher standards is no easy task. Quoting Leavitt again, "The job is never done. In fact, each increment of progress gets harder because we're now reaching for the high-hanging fruit. We have to keep moving forward, relentlessly pursuing improvement and finding better ways." Leavitt concluded that the answer lies in science and technology, what he called "the engines of environmental progress…They make the improbable possible."

International Collaboration is Essential

If innovative technology is essential for progress, for many kinds of environmental issues international collaboration is also key. The new Administrator of the EPA, Stephen Johnson, in his Senate confirmation hearing on April 6, 2005, put it plainly: "Just as we live in a global marketplace, many of our environmental problems are becoming increasingly international. These international issues require us to adopt new approaches."

One obvious example is declining fish stocks. With more than 25,000 large fishing vessels plying the seas, the world's fishing capacity has outstripped the reproductive capacity of remaining stocks for many species. The only way to prevent the collapse of the world's fisheries is through determined international cooperation. The United States is leading efforts to crack down on illegal and unregulated fishing practices.

We have also led in efforts to protect other forms of marine life from unnecessary destruction during fishing operations. Sea turtles, for example, are often caught in shrimpers' trawling nets and drown. We required all U.S. shrimpers to install "turtle exclusion devices" on their nets, at a cost between $50 and $400. We have also used trade as an incentive to encourage others to adopt these devices, banning all imports of shrimp that are harvested in ways that harm sea turtles.

Addressing Climate Change Through Technology and International Collaboration

Another area clearly requiring international collaboration is climate change. Emissions in one country can affect the weather halfway around the globe.

Now I know that many of you, recalling that the U.S. does not participate in the Kyoto Protocol scheme, may assume that climate change is the prime example of an environmental issue where the United States does NOT collaborate internationally, but that assumption would be wrong.

The United States is committed to the goals of the UN Framework Convention on Climate Change, including the commitment to stabilize greenhouse gas concentrations at a level that will prevent dangerous human interference with the climate. Although we cannot support the Kyoto Protocol, we are working in numerous ways to meet that obligation.

Domestically, we are working with our businesses on voluntary programs to reduce greenhouse gases. The President has announced as a target to reduce the greenhouse gas intensity of the American economy -- the amount of greenhouse gas emitted per dollar of GDP) -- by 18 percent by 2012. We are using tax incentives and government research funds to encourage the use of renewable energy and more efficient energy technologies. The United States is the world's top producer of renewable energy, generating more than 116,000 MW of electricity from environmentally-friendly sources. In the area of climate change research, the United States spends more than $1.7 billion annually, more than the rest of the world combined.

Internationally, we have entered into 13 formal bilateral relationships for cooperation on climate change, including with Korea. Together the U.S. and its 13 partners account for more than 70 percent of greenhouse gas emissions.

The United States firmly believes that innovative technology can allow us to reduce greenhouse gas emissions without threatening the world's economic future. That is why we launched or supported five innovative international partnerships aimed at accelerating

technological change. There is the International Partnership for a Hydrogen Economy, working to speed development of hydrogen fuel cells and the infrastructure that would be needed to support hydrogen-powered cars and homes. Hydrogen produces little more than water when it is burned.

There is the Methane-to-Markets Partnership, which aims to capture and profitably use methane leaking from landfills, coal mines and oil production. Capturing methane can have a big impact because methane is more than 20 times as powerful a greenhouse gas as carbon dioxide.

There is the Generation IV Nuclear Partnership, which aims to develop efficient nuclear plants producing less waste and presenting less risk of nuclear proliferation.

There is the International Thermonuclear Experimental Reactor (ITER) project, an international partnership to explore the feasibility of clean nuclear fusion technology. While it is technically a huge challenge, if we are successful, fusion can provide a virtually unlimited source of pollution-free electricity.

Finally, there is the Carbon Sequestration Leadership Forum, an international effort to develop technologies to separate and store carbon dioxide from burning coal before it enters the atmosphere. In conjunction with this effort, the U.S. is also sponsoring a $1 billion, 10-year demonstration project called FutureGen to create the world's first coal-based zero-emissions power plant.

Korea and the United States are Partners on the Environment

This speech is already longer than I intended, but I didn't want to conclude without highlighting the fact that the United States and the Republic of Korea cooperate closely on the environment.

The U.S. Environmental Protection Agency works with the Ministry of Environment and the City of Seoul, through the "Integrated Environmental Strategies" program, to reduce air pollution in the Seoul metropolitan area.

Korea is also an important partner in four of the five energy technology initiatives outlined above -- the International Partnership for the Hydrogen Economy, the Generation IV nuclear partnership, ITER, and most recently, the Methane-to-Markets Partnership.

Researchers at Seoul National University are also involved in an important project with our National Atmospheric and Oceanic Administration to gather data about the Atmospheric Brown Cloud phenomenon.

Conclusion

As stated in advertisements on cable channels recently, we truly live on a small island floating in a sea of empty space. This is the only home we've got. The United States is proud to stand with Korea and other countries in the effort to protect our joint living space for future generations.

Thank you.